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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Duane Morris LLP				
505 9th Street, N.W.				
Suite 1000				
Washington, DC 20004				
EXAMINER				
LEE, JOHN J				
ART UNIT		PAPER NUMBER		
2618				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/586,743

Applicant(s)

BECK ET AL.

Examiner

JOHN LEE

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-20 is/are allowed.
- 6) ☒ Claim(s) 1, 3-7, 9-14, 21, and 22 is/are rejected.
- 7) ☒ Claim(s) 2 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 - 22 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1, 3-7, 9-14, 21, and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Leslie et al (US 5,541,979) in view of Losh et al. (US 2005/0020203).

Regarding **claim 1**, Leslie teaches a wireless communication system (Fig. 1). Leslie teaches a plurality of base stations (base stations in communication system see Fig 1), at least one mobile appliance (mobile terminal in Fig. 1), at least one repeater (repeater in Fig. 1), and a control and management device (digital cellular communication system including controller or management device) (see Fig. 1 and column 5, lines 53 – column 6, lines 63). Leslie teaches the at least one repeater further comprises a scanning receiver (repeater having scanning receiver in Fig. 1), and an interface wherein the scanning receiver is adapted to measure attributes of reverse link channels (the repeater including scanning receiver is configuring to measure and translate reverse link digital traffic channel for determining whether the signal can be provided to mobile terminal or

can be served for base system or repeater (cell extender)) to determine whether a signal has been served by the at least one repeater or has been received directly from a mobile appliance (Fig. 1, 2 and column 3, lines 50 – column 4, lines 56, where teaches the repeater including scanning receiver is configuring to measure and translate reverse link digital traffic channel for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength) and wherein the interface operably connects (interfacing connection with repeater and base station via control and management device) the at least one repeater and the control and management device (see Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56).

Leslie does not exactly teach the limitation “the interface operably connects the at least one repeater and the control and management device”. However, Losh supportly teaches the limitation “the interface operably connects the at least one repeater and the control and management device” (pages 3, paragraphs 30 – 33 and Fig. 1, where teaches the repeater interfacing or connecting with controller or management device and mobile terminal). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the Leslie’s communication system or structure as taught by Losh, provide the motivation to enhance controlling a quality communication between a repeater and base station via mobile terminal in wireless communication system.

Regarding **claim 6**, Leslie and Losh teach all the limitation as discussed in claim 1. Furthermore, Leslie further teaches that scanning signals at the network device (Fig. 1,

2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches the network and scanned signals). Leslie teaches measuring an attribute of the scanned signals (Fig. 1, 2 and column 3, lines 50 – column 4, lines 56, where teaches the repeater including scanning receiver is configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength). Leslie teaches communicating to a system manager the attributes of the scanned signals measured at the network device (Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches interfacing connection with repeater and base station via control and management device that configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength). Leslie teaches determining which signals are served by the network device or are received directly from a mobile appliance based at least in part of the measured attributes (Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches interfacing connection with repeater and base station via control and management device that configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength).

Regarding **claim 3**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the scanning receiver is connected to an antenna of the at least one repeater (Fig. 1, 2 and column 3, lines 50 – column 4, lines 56, where teaches the repeater including scanning receiver coupling an antenna is configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength).

Regarding **claim 4**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the at least one repeater and control and management device are connected via a wireless channel of one of the plurality of base stations (Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches interfacing wirelessly connection with repeater and base station via control and management device that configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength).

Regarding **claim 5**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the control and management device is connected to mobile switching center (digital cellular communication system including controller or management device) (see Fig. 1 and column 5, lines 53 – column 6, lines 63).

Regarding **claim 7**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the attributes reflect a proximity (determining location or position for determining mobile is living or not) to the network device (Fig. 1, 2, column 6, lines 15 – column 8, lines 35, and column 3, lines 50 – column 4, lines 56).

Regarding **claim 9**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the network device is a repeater (Fig. 1, 2 and column 6, lines 15 – column 8, lines 35).

Regarding **claim 10**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the network device is a micro station (Fig. 1, 2 and column 6, lines 15 – column 8, lines 35).

Regarding **claim 11**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that identifiers of the reverse channel are communicated along with the attributes (Fig. 1, 2 and column 3, lines 50 – column 4, lines 56, where teaches the repeater including scanning receiver is configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength).

Regarding **claim 12**, Leslie and Losh teach all the limitation as discussed in claim

1. Furthermore, Leslie further teaches that the attributes are communicated to the system manager via the receiver (Fig. 1, 2, column 6, lines 15 – column 8, lines 35, and column 3, lines 50 – column 4, lines 56).

Regarding claim 13, Leslie and Losh teach all the limitation as discussed in claim 1. Furthermore, Leslie further teaches that the attributes are compared to a threshold at the system manager (Fig. 1, 2, column 6, lines 15 – column 8, lines 35, and column 3, lines 50 – column 4, lines 56).

Regarding claim 14, Leslie and Losh teach all the limitation as discussed in claim 1. Furthermore, Leslie further teaches that the identifiers of the reverse channel are translated into mobile appliance identity information with information provided from a mobile switching center (Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches interfacing connection with repeater and base station via control and management device (MSC) that configuring to measure and translate reverse link digital traffic channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength).

Regarding claim 21, Leslie and Losh teach all the limitation as discussed in claims 1 and 6. Furthermore, Leslie further teaches that monitoring communications associated with the mobile device at a repeater to obtain uplink timing (measuring uplink or reverse link timing) and the mobile device's identity (abstract, Fig. 1, 6, column 3, lines 50 – column 4, lines 56, and column 11, lines 62 – column 12, lines 55). Leslie teaches that scanning for the mobile device's uplink signal at the repeater (Fig. 1, 2, column 6, lines 15 – column 8, lines 35 and column 3, lines 50 – column 4, lines 56, where teaches interfacing connection with repeater and base station via control and management device that configuring to measure and translate reverse link digital traffic

channel or scanning signal for determining whether the signal can be provided to mobile terminal or can be served for base system or repeater (cell extender) by measuring signal strength). Leslie teaches that measuring signal characteristic (timing or strength or could be any measurement) of the mobile device's uplink signal (reverse link signal) at the repeater (abstract, Fig. 1, 6, column 3, lines 50 – column 4, lines 56, and column 11, lines 62 – column 12, lines 55). Leslie teaches that determining the mobile device's proximity to the repeater based upon the measured signal characteristic (timing or strength or could be any measurement) and providing a location of the repeater as the determined location of the mobile device (determining location or position for determining mobile is living or not) (Fig. 1, 2, column 6, lines 15 – column 8, lines 35, and column 3, lines 50 – column 4, lines 56).

Regarding **claim 22**, Leslie and Losh teach all the limitation as discussed in claims 1 and 21. Furthermore, Leslie further teaches that the scanning receiver compares characteristics (comparing timing or strength or could be any measurement of the reverse link signal) of the mobile device's uplink signal with information received from the base station (Fig. 1) and the processor determines the mobile device's proximity to the repeater based upon the measured characteristics (Fig. 1, 2, column 6, lines 15 – column 8, lines 35, and column 3, lines 50 – column 4, lines 56, where teaches determining location or position by comparing the measurement for determining mobile is living or not).

Allowable Subject Matter

4. Claims 15 - 20 are allowed.

Claims 15 - 20 are allowable over the prior art of record because a search does not detect the combined claimed elements as set forth in the claims 15 - 20.

As recited in independent claim 15, none of the prior art of record teaches or fairly suggests that determining if a mobile appliances signal received at a base station has been operated on by one or more repeaters, scanning reverse channel signal at the one or more repeaters, measuring one or more attributes of the scanned reverse channel signals, transmitting to a system manager over a link the attributes of the scanned reverse channel signals and channel information of the reverse channel signals, determining the proximity of the mobile appliance to the one or more repeaters based at least in part by the measured attributes, determining which reverse channel signals are served by the one or more repeaters based at least in part by the proximity of the mobile appliance to the one or more repeaters, and together with combination of other element as set forth in the claims 15 - 20. Therefore, claims 15 - 20 are allowable over the prior art of records.

5. Claim 2 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to disclose the limitation "the attributes are selected from group comprise signal characteristics, signal strength and band of received power" as specified the claims.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Leslie (US 6,404,775) discloses Band-Changing Repeater with Protocol or Format Conversion.

Information regarding...Patent Application Information Retrieval (PAIR) system... at 866-217-9197 (toll-free)."

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to the Customer Service Window
(now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**.
He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00
pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Nay**
Maung, can be reached on **(571) 272-7882**. Any inquiry of a general nature or relating to
the status of this application should be directed to the Group receptionist whose telephone
number is (703) 305-4700.

J.L
February 25, 2011

John J Lee

/JOHN LEE/
Primary Examiner, Art Unit 2618